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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,325	06/28/2000	Michael T. Moore	0325.00372	6269

21363 7590 09/22/2003

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EXAMINER	
NGUYEN, MIKE	

ART UNIT	PAPER NUMBER
2182	7

DATE MAILED: 09/22/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/605,325	MOORE, MICHAEL T.	
	Examiner	Art Unit	
	Mike Nguyen	2182	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondenc address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *27 June 2003* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Notices & Remarks

1. Applicant's amendment file on 06/27/2003 in response to Examiner's Office Action has been reviewed. The following rejections now apply.

2. Claims 1-20 are pending for the examination.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-2, 4-6, and 9-20 rejected under 35 U.S.C. 102(e) as being unpatentable by Tang et al. (U.S. Pat. No. 6,389,321 B2)

4. As to claim 1, Tang teaches an apparatus comprising:

a wireless transceiver coupled to a programmable logic circuit, wherein said

programmable logic circuit comprises a programmable logic device, a processor, and memory circuit in a single circuit (IC) package (see fig. 6 elements 601, 600, 404, 405, 605, 606 and col. 4 lines 33-59).

5. As to claim 2, Tang teaches the apparatus according to claim 1, wherein said single integrated circuit package contains one or more integrated circuit dies (see fig. 8 and col. 3 lines 63-67).

6. As to claim 4, Tang teaches the apparatus according to claim 1, wherein said wireless transceiver is contained within said package (see fig. 6 element 601 wherein the wireless transceiver is contained within the integrated circuit package 600).

7. As per claims 5 and 6, Tang teaches the apparatus wherein said wireless transceiver communicates using either electromagnetic or ultrasonic waves and said electromagnetic waves comprise radio signals or infrared light (see figs 2, 3 elements 202, 302).

8. As to claim 9, Tang teaches the apparatus according to claim 1, wherein said processor and said programmable logic device are implemented on a single die (see fig. 4).

9. As to claim 10, Tang teaches the apparatus according to claim 1, wherein said processor is selected from the group consisting of a microprocessor, a micro-controller or other processor, a digital signal processor, and instructions stored in said memory circuit for configuring said programmable logic circuit as a processor (see fig 8 elements 801, 805-807 and col. 3 lines 63-67 and col. 4 lines 1-11).

10. As to claim 11, Tang teaches the apparatus according to claim 10, wherein said instructions configure said programmable logic device as a device selected from the group

consisting of a microprocessor, a micro-controller, and a digital processor (col. 3 lines 63-67 and col. 4 lines 1-11).

11. As to claim 12, Tang teaches the apparatus according to claim 1, wherein memory circuit comprised one or more non-volatile memory elements (see fig. 6 elements 607-608).

12. As to claim 13, Tang teaches the apparatus according to claim 1, wherein said programmable logic device comprises one or more memory elements (see fig. 6 elements 607-608).

13. As to claim 14, Tang teaches the apparatus according to claim 13, wherein said memory elements are non-volatile (see fig. 6 elements 607-608).

14. As to claim 15, Tang teaches a method for programming a programmable logic device using a wireless link (see figs 2, 3) comprising the step of:

(A) presenting programming signals to a wireless transceiver (see figs 5, 6 and col. 4 lines 18-32); and

(B) programming a programmable logic circuit in response to said program signals, wherein said programmable logic circuit comprised a programmable logic device, a memory circuit, and a processor in a single integrated circuit package (see fig. 6 and col. 4 line s 33-59).

15. As per claims 16 and 19, Tang teaches the method according to claim 15 and the apparatus according to claim 18, wherein said wireless transceiver is contained in said integrated circuit package (see fig. 6 element 601 wherein the wireless transceiver is contained within the integrated circuit package 600).

16. As to claim 17, Tang teaches the method according to claim 15, further comprising the steps of:

(C) during a first bootup, configuring said programmable logic device as said processor in response to instructions stored in said memory circuit (see col. 3 lines 63-67 and col. 4 lines 1-11); and

(D) reprogramming said memory circuit in response to said programming signals (see col. 3 lines 63-67 and col. 4 lines 1-11).

17. As to claim 18, Tang teaches an apparatus (see fig. 6) comprising:

a programmable logic device (see fig. 6 elements 404-405);

a memory circuit (see fig. 6 element 607-608);

a processor (see fig. 6 element 605); and

a wireless transceiver, wherein said programmable logic device, said memory circuit, and are encased in a single integrated circuit (IC) package (see fig. 6 elements 601, 600, 404, 405, 605, 606 and col. 4 lines 33-59).

18. As to claim 20, Tang teaches the apparatus according to claim 18, further comprising a transducer coupled to said wireless transceiver (see fig. 6 elements 601, 602, "ANTENNA").

Claim Rejections - 35 USC § 103

19. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

20. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tang in view of Deming et al. (U.S. Pat. No. 5,864,486).

As to claim 3, Tang fails to explicitly teach a JEDEC standard integrated circuit package. Deming; however, teaches the integrated circuit comprises a JEDEC standard integrated circuit package (see column 1 lines 27-45). It would have been obviously a person having ordinary skill in the art to have the JEDEC standard integrated circuit package taught by Deming in order to cover the standardization of discrete semiconductor device (see col. 1 lines 14-23).

21. Claims 7-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tang in view of Philip S. Esnouf (U.S. Pat. No 5,364,108).

As per claims 7-8, Tang fails to explicitly teach: the group consisting of a light emitting/sensitive device, and an ultrasonic transducer; and said light emitting/sensitive device comprises an infrared diode or other type or wavelength of light emitting/sensitive diode or transistor. Esnouf; however, teaches the apparatus wherein said wireless transceiver communicates through a device selected from the group consisting of a light emitting/sensitive device and an ultrasonic transducer (see figure 7 and column 11 lines 12-17 and column 13 lines 43-50); and said light emitting/sensitive device comprises an infrared diode or other type or wavelength of light emitting/sensitive diode or transistor (see figure 7 and column 11 lines 12-17). Given the teaching of Esnouf, a person having ordinary skill in the art would have readily recognized the desirability and advantages of modifying Tang by employing the well known or conventional feature of the apparatus, such as taught by Esnouf, in order to provide transforming signals.

Response to Arguments

22. Applicant's arguments with respect to claim 1-20 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

23. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mike Nguyen whose telephone number is (703) 305-5040 or e-mail is mike.nguyen@uspto.gov. The examiner can normally be reached on Monday through Friday from 8:00 AM to 5:00 PM.

The appropriate fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Jeffrey Gaffin, can be reached on (703) 308-3301.

Any inquiry of a general nature or relating to the status of this application should be directed to the group receptionist whose telephone number is (703) 305-3900.

JEFFREY GAFFIN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100

Mike Nguyen
Patent Examiner
Group Art Unit 2182

09/11/2003